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II.—THE ORDER OF CONDITIONAL THOUGHT.¹

I.

The intellection that finds expression in speech has two aspects. First, we may lay stress on the *selective process by which words are chosen and grouped* to express the thought; this is the point of view of (e. g.) Morris in Chap. II of "On Principles and Methods in Syntax". Secondly, stress may be laid on the *process of thought itself* which is to find expression in words. I need not argue that these two kinds of intellection are different, and that the second is the real and essential thing, the first being merely an incidental. For otherwise the untrained deaf and blind who do not know that things (to say nothing of abstractions) have names, would be incapable of intellection; this, of course, is not true. James (Principles of Psychology, Vol. I, p. 253 ff) makes such a distinction very clearly; he says in part, "and has the reader never asked himself what kind of a mental fact is his *intention of saying a thing* before he has said it? It is an entirely definite intention . . . an absolutely distinct state of consciousness therefore; and yet how much of it consists of definite sensorial images? Hardly anything! Linger, and the words and things come into the mind; the anticipatory intention, the divination is there no more. But as the words that replace it arrive, it welcomes them successively and calls them right if they agree with it, it rejects them and calls them wrong if they do not. It has therefore a nature of its own of the most positive sort, and yet what can we say about it without using words that belong to the later mental facts that replace it? . . . One may admit that a good third of our psychic life consists in these rapid

¹ The matter set forth in this study is the result of long and patient deliberation and the collection of a great number of conditional sentences. These facts may excuse a syntactician for encroaching on a subject that properly falls within the realm of psychology, the more so as little seems to have been done by professed psychologists along these lines. I wish here to express my obligation to my colleague, Prof. G. M. Stratton, for his careful examination of the psychological parts of the paper and for his helpful suggestions.

premonitory perspective views of *schemes of thought not yet articulate*" (italics mine). In the sections of this paper numbered 1-3 inclusive I invite the reader's undivided attention to the schemes of thought—the attitudes of mind—that find expression in conditional sentences, leaving for consideration in the following sections the wholly different problem of the words and the verbal form generally through which we communicate these schemes of thought to others.

I.

In the panorama known as the stream of consciousness there is a constant progression of concept-groups. Every conditional thought-period involves at least two groups; these, according to their function, may be called the *conditioning* and the *conditioned* concept-groups.¹ Obviously there are two possible orders for the concept-groups that are most intimately concerned in conditional thought-periods; a concept-group may *condition* another group that lies further down the stream of consciousness, or a concept-group may *be conditioned* by a subsequent group. Of course, complicated cases arise—the two groups may not be closely contiguous, or a group already conditioned by a preceding group may be again conditioned by a following group, but *ultimately* all conditional thought-periods can be reduced to the two types above mentioned.

According as the prior group conditions or is conditioned, the result may be styled a Consequence or a Proviso period. The distinction thus drawn is not a mere formal one; the thinking of a Proviso Period involves a process of intellection quite different from that which occurs in the thinking of a Consequence Period. This I hope to make clear by a careful analysis of the two orders of conditional thought. In order to get examples of conditional thinking in which there is no suspicion of complication from previous concept-groups, it is perhaps most satisfactory to sup-

¹I hesitate to use a more definite term than "concept". However, Jerusalem (Die Urtheilsfunction, p. 158) says of conditional periods, "Sie bestehen aus zwei Urtheilen und aus der Behauptung einer Beziehung zwischen diesen Urtheilen", thus apparently conceiving of the concept-groups in question as judgments. But it certainly seems that this name describes more accurately the conditioned group (excepting those cases, perhaps, in which there is an element of will or the like) and the act of intellection which binds the two groups together than it does the conditioning group.

pose cases of dialogue. Here the words of one person may suggest to another a new idea quite foreign to his present attitude of mind. Thus a new train of thought is started in the mind of the latter, and we can examine at our leisure the intellection that ensues according as this first group suggests another concept-group which it conditions or as it is itself conditioned by a subsequent group.

2.

THE CONSEQUENCE PERIOD (the prior concept-group conditions).

To illustrate this order of conditional thought simply, suppose that A and B are working together; they come to a prop that stands in A's way, and he says to B, "Let us take out this prop". These words suggest to B's mind the concept-group "our taking out the prop"; then, knowing his business better than A, his mind leaps forward to the consequence that will be entailed by the carrying out of A's suggestion—that the roof above will fall; this forms the second concept-group, "the falling of the wall", and the connection of thought between the two is that the realization in fact of the first concept-group *entails* the realization in fact of the other. If B chooses to communicate his thought to A, observing the order in which it occurred to his own mind, the result, expressed in a hypotactic period, is

"If we do that (i. e. take out the prop), the wall will fall".¹

The intellection here involved may be described as the apprehension that the coming to pass of one event *entails* the coming to pass of another²—in this case that the taking out of the prop will result in the fall of the wall; the prior concept-group conditions, i. e. makes the second group dependent on itself.³

¹ This, of course, is not the only order or the only way in which B might express his thought. Here the verbal form is chosen to help to a clear understanding of the thought and its order. The other question will be treated later.

² To make of this statement a definition that would apply to all Consequence Periods, the term "apprehension" must be taken broadly enough to include those cases that have an element of will or the like in the conditioned group (indicated in speech by e. g. an imperative in apodosis). "Entail" here refers to a literal sequence; in other cases it has to be otherwise interpreted.

³ It may be interesting to note that this statement just reverses the mechanical nomenclature of formal grammar.

Such intellection, in its lowest forms, is fundamental, and the necessary consequence of rationality. Even the most careless observation of the workings of cause and effect in the happenings of every day life could not fail to place an intellect of the rudest order in a position to forecast the outcome of many a projected action. The veriest savage who saw a child stretching out its hand to the fire, would judge, on the basis of his past observation, that the contact of the hand with the fire entails a burn. He may not, like B in the example above cited, have at his command a hypotactic sentence for the conveyance of his thought and say to the child,

"If you touch that, you will be burned".

But we are not at present concerned with the form of speech used to convey the thought. What I would emphasize is the fact that when the savage realizes that the child is planning to touch the fire, and his thought leaps to the consequence entailed by the projected action, his intellection is identical in kind with that which passes in B's mind when A suggests that they take out the prop. The difference between the two examples is that in the second it takes a more trained observation to arrive at the consequence of the impending action. This being so, the fundamental and essential nature of the Consequence Period must be obvious; the happenings of every day life cannot fail to produce such intellection in us and in all rational creatures when and wherever found—if we would, we could not help forecasting the outcome of many a projected or impending action with which, and with whose consequence, our experience had made us familiar. To the simplicity and ingenuousness of the intellection here involved the Proviso Period affords a sharp contrast.

3.

THE PROVISIO PERIOD (the prior concept-group is conditioned).

To illustrate simply, suppose that A says to B, "I want C to come over to my house this afternoon. Do you think he will come?" B, knowing the pleasure this invitation will bring to C, is inclined to accept for him, but a second thought leads him to condition the acceptance of the invitation. If we represent his thought in words with a view to retaining the order in which it stands in his own mind, the result is (e. g.),

"He will come, if it does not rain".

Or, if the second thought does not occur to B's mind instantly, he may begin to speak before the conditional thought-period is formed, thus producing a sort of hybrid expression—an out-and-out acceptance, with a conditioning clause appended; thus,

“He will come—that is, if it does not rain”.

B's first concept-group (suggested by A's invitation) is “C's going to A's house this afternoon”, and this is conditioned by another group lying further down the stream of consciousness, namely, “its not raining”. But (and this fact makes the Proviso Period something more than a Consequence Period reversed) B does not pass *directly* from the prior group to the conditioning group. A closer inspection of his intellection will make this clear. As the concept-group “C's going to A's house this afternoon” rises in B's mind, for one brief instant he perhaps fancies C as actually performing the act in question—he sees nothing to prevent; then the thought of rain—a *possible hindering circumstance*—flashes across his mind. It is on the converse (or, if you will) the non-occurrence of this possible hindering circumstance that B conditions the acceptance. Such an intermediate step as this possible hindering circumstance is absolutely essential to the thinking of every Proviso Period; for without the occurrence to the mind of some reason why the thing in question should or may not come to pass, how would it ever occur to the speaker to condition his prior group? In the present case B would not condition the acceptance were it not for the thought of possible rain.¹

¹ There is a chance for a little confusion here regarding those cases where a person is casting about for a cause to account for, or a means to produce, a given effect. Thus, suppose A and B enter a building, *looking for a means to bring down its roof*. A first solves the problem and says to B, “It will come down, if we take out that beam”. Apparently the conditioned group (“the falling of the roof”) is the starting point of the thought, while the conditioning group follows; if this be true, the thought constitutes a Proviso Period according to the terms of my own definition. Yet manifestly the intermediate step above referred to is lacking—it would be absurd to claim that, under the given circumstances, A first is sure that the wall is coming down, and then conditions his statement because the thought flits through his mind that B will be unwilling to take the beam out. The solution of the difficulty is reached by comparing the thought in this example with that which underlies “He will come, if it does not rain”. In this latter case the (ultimately) conditioned group is not at first conditioned at all—there is no

The possible hindering circumstance, "its raining", by its very nature involves still another group that has not yet been mentioned, namely, "C's not going to A's house this afternoon"; this group embodies the consequence entailed by the realization in fact of the possible hindering circumstance, and is at the same time the converse (i. e. it deals with the non-realization in fact) of the first group that appears in the speaker's mind, "C's going to A's house this afternoon". We must admit the presence of this new group in the thought complex of the Proviso Period; for, as shown above, the presence of a possible hindering circumstance is essential to that order of conditional thought, and (e. g., in the present case) "its raining" takes on the necessary character of a *hindering* circumstance only as it is felt to entail C's not going. The relations of the four groups concerned in the Proviso Period under discussion may be illustrated as follows:

(1) C's going to A's house this afternoon \rightarrow (2) its raining.

\swarrow ↓
 (3) C's not going to A's house this afternoon (4) its not raining.
 (converse of 1). (converse of 2).

The two groups that receive full verbal expression are 1 and 4;

"He will come, if it does not rain".

If B were to give full verbal expression to 2 and 3, the result would be;

"(but) if it rains, he will not come".

The thought underlying this last sentence is a Consequence Period; for the prior concept-group conditions, and its realization in fact is felt to entail the realization in fact of the other.¹ This involved

thought of the act being contingent until the possible hindering circumstance looms up. But when A and B go into the house *looking for a means* to bring down the roof, the coming down of the roof *is already contingent*—contingent upon the working of an (as yet) undiscovered means. If we represent this as yet undiscovered means as x, the attitude of mind of the two searchers is "the coming to pass of x will bring down the roof". When x is solved by A as = the taking out of a given beam, this value takes the place of x in his mind, and his thought now is "the taking out of that beam will bring down the roof". In other words, "the coming to pass of x will bring down the roof" is a skeleton Consequence (not Proviso) Period which is filled out when the value of x is discovered.

¹In many cases the Consequence Period is of the type described in the preceding footnote. This is true (e. g.) when a person casts around for some reason why the thing suggested should or may not happen (for instance, to find an excuse for not accepting an invitation).

Consequence Period is not only present to the mind of the speaker, but it is conveyed to the hearer "by implication" i. e., by the general circumstances under which the words are spoken, and by the tone and manner of the speaker perhaps. For when B says to A,

"He will come, if it does not rain",

and he thus finds his invitation accepted with a condition attached, he instantly will infer the possible hindering circumstance "its raining" which causes B to condition the acceptance. And inasmuch as this is a *hindering* circumstance, it cannot fail to carry with it the suggestion of C's not coming. Consequently the thought really conveyed to A would find fuller expression in,

"He will come, if it does not rain; *otherwise not*."

The last clause in this sentence is a shorthand way of saying,

"(but) if it does, he will not come".

It might be noted in passing that, conversely, it is the suppression or slighting of groups 2 and 3 in the spoken form that causes the "implication" that lurks about the verbal expression of the Proviso Period.¹

¹ That there is such an implication lurking about the expression of a Proviso Period may be brought out clearly by contrasting with the above sentence the one used as the expression of a Consequence Period, when A suggests to B the taking out of the prop, namely,

"If we do that, the wall will fall".

There is nothing in the thought underlying this sentence to justify adding "otherwise not" to it. If B should add these words A would think that he was either joking or had lost his senses. As a matter of fact it does not follow that if the prop is not taken out the wall will not fall—an earthquake might bring it down; but that is not the thing of prime importance for this discussion. The really important thing is that the attention of neither the speaker nor the hearer is centered on what will happen if the prop is *not* taken out—that is not the angle, so to speak, from which they are viewing the situation; their thought is concerned with the projected action and its outcome. Though Jerusalem does not distinguish between Consequence and Proviso Periods, still (l. c. pp. 160-161) he feels the Proviso implication in one of his random examples. The sentence is "Wenn morgen schönes Wetter ist, werden wir einen Ausflug unternehmen". Later he adds "In dem Urtheil liegt zugleich der Gedanke, das der Ausflug bei schlechtem Wetter nicht unternommen wird". Of course the implication is not always "otherwise not"; that phrase is convenient

The fact that a Consequence Period is bound up in the thinking of every Proviso Period justifies the statement that the latter is the more complex form of intellection; I hope to show also that it is less ingenuous. This is a difficult matter to judge of, principally because of our long familiarity with conditional thinking and with conditional speaking of a highly developed type. Off-hand, the thought that underlies

"He will come, if it does not rain"

seems just as ingenuous as that which produces

"If we do that, the roof will fall".

But I have tried to show that the veriest savage cannot help thinking Consequence Periods; the most careless observation of the workings of cause and effect in the happenings of daily life place him in a position to forecast the outcome of many projected and impending actions. The train of thought that passes through his mind when he sees a child stretching out its hand to the fire (namely, the apprehension that the consummation of the impending action will result in a burn) is thoroughly ingenuous; yet it contains all the essentials of a Consequence Period.

On the other hand the intellection involved in the Proviso Period—the apprehension that the coming to pass of one event is dependent on another—appears to be a reflex of language on thought—a result of *hearing* clauses conditioning and conditioned put together in speech. Of course the situations in which we think Proviso Periods (e. g. when we wish to accept an invitation, but are checked by the thought of a possible hindering circumstance) were doubtless paralleled in primitive times; but that they, without any outside influence, would lead to thought in the form of Proviso Periods is not so obvious. This will perhaps be

for reference, but in practice it has to be varied to suit the apodosis if that chances to contain a negative.

With this implication of the Proviso Period must not be confused concept-groups that *follow* certain Consequence Periods. E. g., in the case supposed above, B, after he apprehends that the taking out of the prop will result in the fall of the wall, may wish the prop not taken out, feel an impulse to stop A, etc. These elements are not a part of the Consequence Period as may be seen by taking a case in which the speaker has no interest in the outcome. For instance, "I think the rock will fall"; "If it does, it will bring down much earth".

made clearer by a reference to the analysis above given of the process of thought which finds expression in the sentence,

"He will come, if it does not rain".

The groups and their relations were as follows :

(1) C's going to A's house this afternoon \rightarrow (2) its raining.

(3) C's not going to A's house this afternoon (4) its not raining.

The process of thought up to and including 3 is thoroughly ingenuous—B is inclined to accept the invitation for C, then there flashes across his mind a possibility (its raining) with which he had not reckoned and which takes on the character of a possible hindering circumstance, as it suggests the outcome entailed by its realization in fact, namely, C's not coming. A simple form of expression for this intellection would be a sentence of the following type:

"He will try to come" } (but) it may rain".
 "He will want to come }

Instead of accepting the invitation outright, the speaker here says, "He will try to come" or "He will want to come", because he has in mind the possibility of rain and feels it as a possible hindering circumstance; to the first clause he appends a statement of this possible hindering circumstance.

In situations like this I see nothing to force a mind under no outside influence to the thinking of Proviso Periods—nothing that would suggest the trick of bringing to light the converse of group 2, thus producing group 4, and in this way arriving at a conditional thought-period made up of 1 and 4. Nor yet is it clear how the mere *thinking* of the simpler types of the Consequence Period (the apprehension that a projected or impending action entails a certain result) could suggest the wholly different process of intellection involved in the Proviso Period (the apprehension that the coming to pass of one event is dependent on the coming to pass of another). By a process of exclusion, then, we seem forced back to the *hearing* of clauses conditioning and conditioned in actual speech to explain how the thinking of Proviso Periods originated. Whatever the truth of this last consideration, the simple fact that there is nothing in the situations themselves which suggest to us thought on the Proviso form to force such thinking on an unbiased mind, whereas the same

situations that suggest to us thought in Consequence Periods must necessarily produce a like result in all rational minds everywhere, is enough to substantiate the claim that the Proviso Period is the less ingenuous order of conditional thought.

4.

THE STAGES OF CONDITIONAL SPEAKING.

There are three—perhaps four—distinctly marked stages in the verbal expression of the conditional thought-periods described in the two preceding sections. In casting about for the simplest form of conditional speaking we ought to look first to the Consequence Period perhaps; for it is the simpler and more ingenuous order of conditional thought, and the intellection involved in it—the apprehension that the coming to pass of a projected or impending action entails the coming to pass of another—calls loudly for expression in words, e. g., to warn another of the dangerous outcome of something he seems about to do. Suppose a mother sees her child stretching out its hand toward the fire; her mind will leap to the consequence of the projected action. The simplest clear expression for this intellection is unquestionably a one-clause phrase, e. g.,

“Burn hand”.

This scant form of speech, which gives full expression only to the second concept-group, is clear to the hearer because the projected action—the thing which starts the Consequence Period in the mother's mind—is clearly present in the child's mind also. Accordingly the words are felt, not as an assertion that a certain event is coming to pass, but rather as the expression of a conditioned concept-group—the child realizes that he is being told what the result entailed by his projected action is. Doubtless the tone of the speaker (in addition to the general circumstances under which the words are spoken) helps the hearer to an understanding that the mother's words are, grammatically speaking, an apodosis. Such a phrase as “Burn hand” may be called conditional speaking of the one-clause stage. The ingenuousness of the intellection involved, the need for its expression, and the simplicity of the verbal form (which we even now affect in speaking to children) all point to the greatest antiquity for conditional speaking of this type.

In the example just used the mother is of course intensely interested in the outcome of the situation before her eyes, and the Consequence Period in her mind *is followed* by a feeling of will that the child shall not act. I say *followed* because clearly she will not experience this feeling of will until she apprehends that the action is projected and forecasts the harmful outcome entailed, i. e., until the Consequence Period has passed through her mind. Though last in intellection, this added element is apt to be first in speech, if expressed at all; e. g.,

“No, no; burn hand”.

Expressions of this kind have caused much confusion to workers in the field of syntax. Take, for instance, a sentence spoken under circumstances that are similar, but with the prohibition more fully expressed:

“Don’t do it; you will be hurt”.

Prohibitions and exhortations thus placed have generally been regarded as substitutes for conditioning clauses. But the real underlying thought (as just shown) in this particular case would find true expression in

“If you do that, you will be hurt; don’t do it”.

For it is only because the speaker has passed through the intellection of a Consequence Period that he is moved to interfere. The process of thought may be lightning-like in its rapidity, but there is no mistaking *the order* in which the elements occur to the mind. “Don’t do it” is the simple bona fide expression of a prohibition—nothing more, nothing less; “you will be hurt” is a conditional sentence of the one-clause stage. What is true of a prefixed prohibition is true of hortatory and like expressions so placed.

If the conclusion reached in section 3 is sound, to the effect that the thinking of Proviso Periods is a reflex of a stage of conditional speaking in which both conditioning and conditioned clauses appear, there is of course no one-clause stage in the verbal expression of the Proviso Period to correspond to the one-clause stage in the expression of the Consequence Period just described. But, waiving this consideration, there is still a mechanical difficulty that would seem to preclude such a one-clause stage.

It is true that, *after the hypotactic stage* has been reached, it is possible to convey the thought of a Proviso Period by a single clause; but it is because the presence of a subordinating particle then makes the function of the clause clear; e. g., when A says to B, "I want C to come over to my house this afternoon. Do you think he will come?" B may answer merely, "If it does not rain". A will understand his meaning because he has already in mind the starting point of B's thought, and the "if" shows that the clause is the expression of a conditioning concept-group. But if B had at his command no conditional particle, and simply expressed his new thought by "it not rain" or "it does not rain", the hearer might well be at a loss to divine the meaning; these words are not by any means as obviously the expression of a conditioning concept-group, as "Burn hand" (in the example of a Consequence Period above cited) are of a conditioned concept-group. Pronouncing the words with an effort to convey the thought of a conditioning concept-group will demonstrate the difficulty involved and the obscurity of the resultant expression, even to us to whom thinking in Proviso Periods is an old story. We may then fairly assume that one-clause conditional speaking is due originally to the Consequence rather than the Proviso Period.

The advance to the next stage of conditional speaking—the two-clause stage—is perhaps also due to the Consequence Period; certainly so, if the thinking of Proviso Periods is a reflex of conditional speaking more developed than that of the one-clause stage. But in any case the need of communicating certain Consequence Periods is sufficient to account for the advance to two-clause conditional speaking. Such a form is demanded in the interest of clearness when the starting-point of the speaker's thought is not obvious to the hearer. For instance, A asks B for aid; C, a friend standing by, sees what will be the outcome of granting the favor and says in B's ear,

"You give to him, he will come again",

i. e., "If you give to him, he will come again." In a case like this the Consequence Period in B's mind could not be conveyed with any certainty by a one-clause phrase "he will come again." The hearer, not knowing surely what was the beginning of the train of thought in C's mind, might not grasp the fact that the words are intended as the expression of a conditioned concept-

group, and thus quite miss the thought to be conveyed.¹ Whenever this two-clause stage of conditional speaking has become established, it may of course be used in cases where the demands of clearness do not call for it imperatively. Thus in the example above, the mother, instead of saying simply, "Burn hand" might use the fuller form,

"Touch fire, burn hand."²

If I now apply the name parataxis to such examples of two-clause conditional speaking as "You give to him, he come again" and "Touch fire, burn hand", the sense in which I use that term will be perhaps clear. Parataxis here means that two clauses stand side by side as the expression of a conditional thought-period, the inner connection of meaning existing between the clauses being indicated by no subordinating conjunction.³

¹ The single clause could be made somewhat clearer to the hearer by the addition of a prohibition, e. g., "Don't do it; he will come again." But even this is ambiguous; the hearer could take it to mean that he was not to give the assistance asked by A because the latter was coming another time, and he would thus have another (and perhaps better) chance to give the desired assistance.

² It is quite possible that the thinking of Proviso Periods is a reflex of this stage of conditional speaking. In this stage the conditioning clause naturally precedes, whatever the order of the underlying thought. In the case of the Consequence Period such an arrangement follows the thought order; but it is also required in the case of the Proviso Period as well, in the interest of clearness; for it is much easier to indicate to the hearer that a prepositive clause is conditioning than it is a postpositive clause. E. g., a man comes to a village and says, "All the men come to fight." One, wishing to accept the invitation, but overtaken by the thought that the chief might object, might conceivably say, "We will come, our chief allows." But his meaning would be conveyed more surely by the other order, "Our chief allows, we will come." Pronouncing these sentences will make this point clear to the reader. That the spoken expression of the Proviso Period should stand in this order is all the more natural if, as suggested above, thinking in the Proviso order is a reflex of hearing two-clause expressions used to convey the Consequence Period; for there both the thought order and the demands of clearness tend to bring the conditioning clause into the first place.

³ This use of the term parataxis will not be acceptable to some; e. g. Bennett (Cornell Studies, IX. p. 66) says "Whatever differences of detail may exist as to the conception of parataxis, all scholars, so far as I am aware, are at least agreed in recognizing its existence only when a sentence is capable of having a value for its own sake as well as for the purpose of determining more fully the meaning of another sentence. In order to exhibit parataxis, the two sentences assumed to have the paratactic relation must each be capable

The third stage of conditional speaking is hypotaxis, a form brought about by the adaptation of a demonstrative or other word to become the bearer of the meaning already existing between the clauses of a conditional sentence in the paratactic stage; e. g. "Touch fire, burn hand" now becomes,

"If you touch the fire, you will burn your hand".

The schemes of thought—the Consequence and Proviso Periods—underlying this type of conditional sentence are identical with those which find expression in the more primitive types of speech above described. Any difference in the intellection that accompanies the paratactic and the hypotactic types of conditional speaking has to do with the process by which thought is rendered into speech, and does not at all affect the closeness of the bond of union that unites the conditioning and the conditioned groups of the thought-period.

Still a fourth stage of conditional speaking should perhaps be recognized. It is conceivable that a hypotactic form of conditional speaking might *be displaced* by a rival form that originally,

of possessing an independent value. Just as soon as one of the two clauses is not capable of functioning alone, but only in conjunction with its neighbor, we have subordination or hypotaxis". If parataxis be defined in this way, there is no paratactic stage of conditional speaking, and we advance at one stride from the one-clause type "Burn hand" to the hypotaxis "Touch fire, burn hand." For conditional thought is in periods, and consequently the two clauses through which the concept-groups involved in a given conditional thought-period find expression must inevitably be bound together by an inner connection of meaning, and could not conceivably (at least the conditioning clause) function separately. This matter will be discussed more fully in the second paper. The use of the term parataxis in this paper is in harmony with the statement of Morris (On Principles and Methods in Syntax, p. 147), "It (parataxis) covers all that lies between coördination and the suggestion of relation by musical means, as the upper limit, and the expression of relation by subordinating words as the lower limit". Even Bennett, when speaking of the conditional sentence (Lat. Gram. App. §394) seems to use the term in this sense; "Conditional sentences are the development of an earlier Parataxis. Thus we may assume that the earliest type of *si valet, bene est* was *bene est, valet*, 'it is well; he is well'. The conditional force was purely the result of the context, which indicated that *valet* was something assumed. As language developed, the fact that one clause was related to the other as an assumption or condition *was brought out more definitely*" (italics mine) "by the use of *si*." This statement applies the name parataxis to a pair of clauses mutually dependent and which lose their distinctive meaning the moment they are torn apart; I am using the term above in just this sense.

or perhaps I should say, in its literal meaning, was not the expression of conditional thought at all. For instance, "grant that" in its literal sense has no conditional meaning, but we use the phrase in certain cases as a substitute for "if". It is conceivable that, in the course of time, "grant that" might come into greater use and finally supplant "if" altogether. Therefore when we take up a given hypotactic conditional construction and attempt to reconstruct its earlier history, it should not be assumed offhand that it is a direct outgrowth from parataxis—it may perhaps be that the word we find introducing the protasis has displaced some other (now lost) which really passed through the development of meaning that advanced the form of conditional speaking in the language under discussion from parataxis to hypotaxis.

In this section four types of conditional speaking have been described; the one-clause stage, parataxis, hypotaxis, and substitution. I have perhaps already indicated clearly enough that these are *types of speech* merely, and that the conditional thought-periods are in all essentials the same whatever the form of verbal expression. These types of conditional speaking have been enumerated in the order of their complexity, taking the simplest first. It is not to be supposed that the history that lies back of the various hypotactic periods in existence to-day can be reduced in every (or perhaps any) case to such an orderly progression. Conditional speaking of the simplest types must be of untold antiquity; since that time language may have supplanted language, conditional speaking may have advanced to a certain point of development and then fallen back again, and one language may have influenced the forms of conditional speech of another. In view of these possibilities one needs to go very slowly in a reconstruction that professes to go back to origins.